



Appl. No. 09/662,258
Amdt. dated: May 4, 2004
Reply to Office Action of December 4, 2003

Docket No. SUN-P4175
(811173-000094)

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

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LISTING OF CLAIMS

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1. (Cancelled)

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2. (Cancelled)

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3. (Currently Amended) A method for representing an application programming interface (API) definition for an object-oriented library, said method comprising: creating a public list including all public classes and interfaces defined in said object-oriented library, said public list including a class sublist for each of said public classes, each said class sublist including all direct and indirect public superclasses of a class and excluding private classes; and storing said list.

4. (Previously Presented) The method of claim 3 wherein said object-oriented library is a Java™ package.

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

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10. (Currently Amended) A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method to represent an application programming interface (API) definition for an object-oriented library, the method comprising:
creating a public list including all public classes and interfaces defined in said object-oriented library, said public list including a class sublist for each of said public classes, each said class sublist including all direct and indirect public superclasses of a class and excluding private classes; and
storing said list.

11. (Previously Presented) The program storage device of claim 10 wherein said object-oriented library is a Java™ package.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

C) 16. (Cancelled)

17. (Currently Amended) An apparatus for representing an application programming interface (API) definition for an object-oriented library, said apparatus comprising:
means for creating a public list including all public classes and interfaces defined in
said object-oriented library, said public list including a class sublist for each of
said public classes, each said class sublist including all direct and indirect public
superclasses of a class and excluding private classes; and
means for storing said list.

18. (Previously Presented) The apparatus of claim 17 wherein said object-oriented
library is a Java™ package.

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

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22. (New) A method for representing an application programming interface (API) definition for an object-oriented library, said method comprising:
- step for creating a public list including all public classes and interfaces defined in said object-oriented library, said public list including a class sublist for each of said public classes, each said class sublist including all direct and indirect public superclasses of a class and excluding private classes; and
- step for storing said list.
23. (New) The method of claim 22 wherein said object-oriented library is a Java™ package.
24. (New) A method for determining a program hierarchy, said method comprising:
- receiving an application programming interface (API) definition file for an object-oriented library, said API definition file including a list of public elements in said object-oriented library, each element comprising a class or interface, each of said public elements including a sublist of all public hierarchically-related elements that are a parent of the element and excluding private classes; and
- indicating a first public element is a direct parent of a second public element when said first public element is represented in the sublist for said second public element and said first public element is not represented in the sublist for any other public element listed in the sublist for said second public element.

25. (New) The method of claim 24 wherein said object-oriented library is a Java™ package.
26. (New) The method of claim 24, further comprising
comparing a first program hierarchy reconstructed from a first API definition file
with a second program hierarchy reconstructed from a second API definition
file; and
indicating an error when said first program hierarchy is inconsistent with said second
program hierarchy.
27. (New) A program storage device readable by a machine, embodying a program of
instructions executable by the machine to perform a method to determine a program
hierarchy, said method comprising:
receiving an application programming interface (API) definition file for an object-
oriented library, said API definition file including a list of public elements in
said object-oriented library, each element comprising a class or interface, each
of said public elements including a sublist of all public hierarchically-related
elements that are a parent of the element and excluding private classes; and
indicating a first public element is a direct parent of a second public element when
said first public element is represented in the sublist for said second public
element and said first public element is not represented in the sublist for any
other public element listed in the sublist for said second public element.

28. (New) The program storage device of claim 27 wherein said object-oriented library is a Java™ package.

29. (New) The program storage device of claim 27, said method further comprising:
comparing a first program hierarchy reconstructed from a first API definition file
with a second program hierarchy reconstructed from a second API definition
file; and
indicating an error when said first program hierarchy is inconsistent with said second
program hierarchy.

30. (New) An apparatus for determining a program hierarchy, said apparatus
comprising:
means for receiving an application programming interface (API) definition file for an
object-oriented library, said API definition file including a list of public
elements in said object-oriented library, each element comprising a class or
interface, each of said public elements including a sublist of all public
hierarchically-related elements that are a parent of the element and excluding
private classes; and
means for indicating a first public element is a direct parent of a second public
element when said first public element is represented in the sublist for said
second public element and said first public element is not represented in the
sublist for any other public element listed in the sublist for said second public
element.

31. (New) The apparatus of claim 30 wherein said object-oriented library is a Java™ package.
32. (New) The apparatus of claim 30, said apparatus further configured to:
- compare a first program hierarchy reconstructed from a first API definition file with
a second program hierarchy reconstructed from a second API definition file; and
indicate an error when said first program hierarchy is inconsistent with said second
program hierarchy.
33. (New) A method for determining a program hierarchy, said method comprising:
- step for receiving an application programming interface (API) definition file for an
object-oriented library, said API definition file including a list of public
elements in said object-oriented library, each element comprising a class or
interface, each of said public elements including a sublist of all public
hierarchically-related elements that are a parent of the element and excluding
private classes; and
- step for indicating a first public element is a direct parent of a second public element
when said first public element is represented in the sublist for said second public
element and said first public element is not represented in the sublist for any
other public element listed in the sublist for said second public element.

34. (New) The method of claim 33 wherein said object-oriented library is a Java™ package.

35. (New) The method of claim 34, further comprising

C) step for comparing a first program hierarchy reconstructed from a first API definition file with a second program hierarchy reconstructed from a second API definition file; and

step for indicating an error when said first program hierarchy is inconsistent with said second program hierarchy.
